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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/783,718	MCCARTY ET AL.	
	Examiner	Art Unit	
	LUN-SEE LAO	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *47-55,57-59,61-65 and 67-86* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *47-55,57-59,61-65 and 67-86* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01-23-2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. This action is response to the AMENDMENT filed on 01-29-2010. Claims 1-46 and 56, 60 and 66 have been cancelled and claims 47, 57-59, 64, 67, 72, 73, 75, 76 and 81 have been amended and claims 82-86 have been added. Claims 47-55, 57-59, 61-65 and 67-86 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "processor converting the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group or a second group of audio signals, each group comprising at least one of the single-channel audio signals; a power amplifier module configured to amplify only the first group of audio signals; and a transmitter configured to transmit the unamplified second group of audio signals along with at least one destination address to a plurality of speakers via a network, the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 47-55, 57-59, 61-65 and 67-86 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 47 recited "processor converting the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group or a second group of audio signals, each group

comprising at least one of the single-channel audio signals; a power amplifier module configured to amplify only the first group of audio signals; and a transmitter configured to transmit the unamplified second group of audio signals along with at least one destination address to a plurality of speakers via a network, the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group". The applicant point out Figures 9 and 11C-14 and paragraph [0034],[0062],[0090] and [0125]-[0128](see the remarks page 8, 1st paragraph) which support the limitation as recited in claim amendments. However, the examiner reads it carefully and can not find that the specification discloses the underlined limitations as set forth above. It is not supported in the specification nor in any claim originary presented and any figures.

Consider claims 75, 76, they are essentially similar to claim 47 and are rejected for the reason stated above apropos to claim 47.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 47-55, 57-59, 61-63 and 71-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swix et al. (US 2004025073) in view of Yasuhara (US PAT. 7,190,798).

Consider claim 47 Swix teaches a device for transmitting signals to speakers, the device comprising (see fig.1):

at least one input receiving an audio signal from at least one input device(see fig.1 (12,21,32), the audio signal being encoded in a channel format having multiple channels (95, 141,142,143,144); a processor (100)converting the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels(see fig.1 (12,21,32)) and being assigned to either a first group(See fig.1 (11,21)) or a second group (32,2)) of audio signals, each group comprising at least one of the single-channel audio signals; a power amplifier module inherently (because TV system and audio system are inherently including amplifier module) configured to amplify the first group of audio signals; and a transmitter(141-144) configured to transmit the amplified second group of audio signals along with at least one destination address to a plurality of speakers via a network, the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group(60 and see page 3 [0035]-page 4[0044]); but Swix does not explicitly teach transmitter configured to transmit the unamplified second group of audio signals along with at least one destination address to a plurality of speakers via a network.

However, Yasuhara teaches at least one input receiving an audio signal from at least one input device(see fig. 9), the audio signal being encoded in a channel format having multiple channels; a processor(2) converting the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group (82, 83) or a second group (4, 84) of audio signals, each group comprising at least one of the single-channel audio signals; a power amplifier module (89) configured to amplify only the first group of audio signals; and a transmitter (3) configured to transmit the unamplified second group (12,13) of audio signals along with at least one destination address to a plurality of speakers via a network (see col. 10 line 25-col. 11 line 67), the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group (see figs. 10-13 and col. 15 line 38-col. 16 line 67).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Yasuhara into Swix to provide the entertainment system comprises a plurality of audio sources and includes a control switch for switching between front control and rear control for user can easily operating the audio source with amplifier or with out the amplifier.

Consider claim 48, Swix teaches the device wherein the transmitter is connected to the plurality of speakers via a network(see fig.1); but Swix does not explicitly teach the network is a powerline. Since, Swix does not limit his network system to any specific kind. The network is a powerline is well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the audio system as taught by Swix could have used an network is a powerline as claimed. Since the system of Swix would have operated well using network is a powerline for communication system.

Consider claim 49-55 Swix teaches the device of wherein the transmitter is connected to the plurality of speakers via a wireless network (see fig. 1 and page 4[0042]); and the device, wherein the network is RF(see fig. 1 and page 2[0042]); and the device wherein the network is IR (see fig. 1 and page 4[0023]); and the device wherein the input is further configured to receive a textual signal and wherein the transmitter is configured to send the textual signal to a display device(see fig. 1 and page 4[0041]-[0044]); and the device wherein the processor is further connected to a display device configured to be a user interface for the processor(see fig.1 and page 2 [0023]); and the device wherein the input is further configured to receive a video signal and wherein the transmitter is configured to send the video signal to a display device(see fig. 1 and page 4[0041]-[0044]); and the device wherein the input is configured to receive an analog signal, wherein the device further comprises a converter configured to convert the analog signal into a digital signal(see page 4[0038]).

Consider claims 57-59 Swix as modified by Yasuhara teaches the device wherein the audio signal is encoded in one of the following channel format: DTS, Dolby Digital, and SRS(see page 4[0038]-[0044]); and the device, wherein the processor is configured to decode the audio signal and select the at-least one speaker for broadcasting the at least one of the audio signals in the second group based on a channel format of the audio signal(In Yasuhara, see fig. 9 and col. 10 line 25-col. 11 line 67); and the device,

wherein the destination address is determined based on user input (see figs 1-2 and page 4[0038]-[0044]); and the device wherein the destination selection unit is configured to select the at least one speaker based on user input(see figs.1-3 and page 2 [0023]-page 3 [0026]).

Consider claims 61-63 Swix teaches the device further comprising a plurality of connectors and an input selector, wherein at least two of the connectors are configured to connect to different devices, and wherein the input selector is reconfigurable by a user to select one of the connectors and receive an audio signal from the selected connector(see figs.1-2 and page 4[0038]-[0044]); and the device wherein the connectors are configured to connect to at least one of the following inputs: analog, digital, SPDIF, and an inter IC sound (I2S) format (see page 4[0038]-[0044]); and the device wherein the device is located inside or proximate to at least one of the following input devices: a television, a compact disc player, a digital video disc player, a MP3 player, a set-top box, a personal computer, and a stereo receiver(see figs.1-2 and page 4[0038]-[0044]).

Consider claims 69-70, Swix teaches plurality of speakers(see fig.1); but Swix does not explicitly teach wherein the plurality of speakers comprises a subwoofer; and wherein the plurality of speakers comprises a surround speaker. Swix does not limit his loudspeaker to any specific kind. a subwoofer speaker and surround speaker are well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the digital video broadcast system as taught by Swix could have used a subwoofer speaker and surround as claimed. Since

the system of Swix would have operated well using a subwoofer speaker and surround speaker to enhance the audio sound output.

Consider claims 71-74 Swix as modified by Yasuhara teaches the device wherein the transmitter further comprises an encryption module configured to encrypt the output signal prior to transmission(see fig.2 and page 5[0045]-[0048]); and the device wherein the second group of audio signals comprises a first and a second signal different from the first signal, wherein the transmitter transmits the first signal for a first speaker to broadcast and the second signal for a second speaker to broadcast, the first and second speaker being selected from the plurality of speakers (In Yasuhara, see fig.9 and col. 10 line 25-col. 11 line 67); and the device further comprising a control input receiving control signal from a user, wherein the processor generates the signal second group of audio signals based on the control signal from a user (In Yasuhara, see fig.9 and col. 10 line 25-col. 11 line 67); and the device wherein the transmitter is connected to a speaker via a receiver within or proximate to the speaker(see figs.1-2 and page 4[0038]-[0044]).

Consider claim 75 Swix teaches a device for transmitting signals to speakers, the device comprising(see fig.1): means for receiving an audio signal from at least one input device(see fig.1 (12,21,32), the audio signal being encoded in a channel format having multiple channels (95, 141,142,143,144); means(see fig.1 (100)) for converting the received audio signal into a plurality of single-channel audio signals, each single-channel signal representing one of the multiple channels and being assigned to either a first group or a second group of audio signals, each group comprising at least one of the

single-channel audio signals; means(see figs. 4, 5) for amplifying only the first group of audio signals; and a transmitter (142,143,144) configured to transmit the amplified second group of audio signals along with at least one destination address to a plurality of the speakers via a network, the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group (60 and see page 3 [0035]-page 4[0044]); but Swix does not explicitly teacha transmitter configured to transmit the unamplified second group of audio signals along with at least one destination address to a plurality of speakers via a network.

However, Yasuhara teaches means (see fig.9) receiving an audio signal from at least one input device, the audio signal being encoded in a channel format having multiple channels; means(2) for converting the received audio signal into a plurality of single channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group (82, 83) or a second group (4, 84) of audio signals, each group comprising at least one of the single-channel audio signals; means for amplifying (89) configured to amplify only the first group of audio signals; and a transmitter (3) configured to transmit the unamplified second group (12,13) of audio signals along with at least one destination address to a plurality of speakers via a network (see col. 10 line 25-col. 11 line 67), the destination address identifying one of the plurality of speakers for broadcasting at least one of the audio signals in the second group (see figs. 10-13 and col. 15 line 38-col. 16 line 67).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Yasuhara into Swix to provide

the entertainment system comprises a plurality of audio sources and includes a control switch for switching between front control and rear control for user can easily operating the audio source with amplifier or with out the amplifier.

6. Claims 76-80 and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shdema et al. (US2002 /0072816) in view of Yasuhara (US PAT. 7,190,798).

Consider claim 76, Shdema teaches a device comprising: at least one input receiving an audio signal from at least one input device, the audio signal being encoded in a channel format having multiple channels(see figs 1,2); a processor (see fig.3 (144,146)) configured to decode the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group (140A in fig.3)) or a second group(142A-142C) of audio signals, each group comprising at least one of the single-channel audio signals; a power amplifier module configured to amplify only the first group of audio signals received from the processor; and a transmitter(see fig.1 (110)) configured to transmit the amplified second group of audio signals along with at least one control signal to at least one speaker via a network(114), wherein the control signal is to be used by the speaker to manipulate at least one of the audio signals in the amplified second group]); but Shdema does not explicitly teach a transmitter configured to transmit the unamplified second group of audio signals along with at least one destination address to a plurality of speakers via a network.

However, Yasuhara teaches a processor (see fig.9 (2)) configured to decode the received audio signal into a plurality of single-channel audio signals, each single-channel audio signal representing one of the multiple channels and being assigned to either a first group (82,83) or a second group (4, 84) of audio signals, each group comprising at least one of the single-channel audio signals; a power amplifier module(89) configured to amplify only the first group of audio signals received from the processor; and a transmitter(3) configured to transmit the unamplified second group of audio signals along with at least one control signal to at least one speaker via a network(see col. 10 line 25-col. 11 line 67), wherein the control signal is to be used by the speaker to manipulate at least one of the audio signals in the unamplified second group (see figs. 10-13 and col. 15 line 38-col. 16 line 67).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Yasuhara into Swix to provide the entertainment system comprises a plurality of audio sources and includes a control switch for switching between front control and rear control for user can easily operating the audio source with amplifier or with out the amplifier.

Consider claims 77-80, Shdema teaches the device wherein the processor is capable of converting an audio signal from any of the following group: a television, a compact disc player, a digital video disc player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center (see page. 6 [0057]); and the device wherein the processor is capable of converting an audio signal from at least one of the following group: a television, a compact disc player, a digital video disc

player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center(see page. 6 [0057]); the device wherein the transmitter(see fig.1 (110)) is connected to a plurality of speakers via a network(114), the device further comprising a destination selection unit (108) configured to select at least one speaker from the plurality of speakers to receive the output signal(150, see page 4 [0034]- {0045]); and the device wherein the amplifier module(see fig.2 (130)) is located in proximity to the transmitter(see fig.1 (110) and page 4 [0034]- {0045).

Consider claims 82-84, Shdema as modified by Yasuhara teaches the device wherein the control signal comprises an amplitude level indicating at which amplitude at least one of the audio signals in the second group is to be broadcasted(In Yasuhara, see figs. 3, 7-9 and col. 10 line 25-col. 11 line 67); the device wherein the control signal is received from a user at the device(see figs 1,2 and page 4 [0034]-[0044]); and the device wherein the processor(see fig.2) is configured to (a) extract a characteristic from the audio signal(126), (b) code the characteristic into a control signal, (c) combine the second group of audio signals with the control signal to form a combined signal(128), and (d) send the combined signal to the transmitter(122,150 and fig. 1(110)), and wherein the transmitter sends the combined signal to the speaker (see figs 1,2 and page 4 [0034]-[0044]).

7. Claims 64, 65, 67, 68, 85 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swix et al. (US 2004/025073) as modified by Yasuhara (US PAT.

7,190,798) as applied to claim 47 above, and further in view of Shdema et al. (US2002 /0072816).

Consider claim 64, Swix does not explicitly teach the device, the device wherein the processor is configured to (a) extract a characteristic from the audio signal, (b) code the characteristic into a control signal, (c) combine the second group of audio signals with the control signal to form a combined signal, and (d) send the combined signal to the transmitter, and wherein the transmitter sends the combined signal along with the destination address to the speakers.

However, Shdema teaches the device, the device wherein the processor(see fig.2) is configured to (a) extract a characteristic from the audio signal(126), (b) code the characteristic into a control signal, (c) combine the second group of audio signals with the control signal to form a combined signal(128), and (d) send the combined signal to the transmitter(122,150 and fig. 1(110)), and wherein the transmitter sends the combined signal along with the destination address to the speakers (see figs 1,2 and page 4 [0034]-[0044]).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Shdema into Swix to provide more efficiency to control communication system.

Consider claim 65, Swix as modified by Yasuhara and Shdema teaches the device wherein the control signal comprises at least one of the following: a volume level, a balance level, a fader level, a sub-bass level(in Shdema, see figs. 1, 2 and see page 4 [0034]-[0044]).

Consider claims 67-68, Swix as modified by Yasuhara and Shdema teaches the device wherein the transmitter is configured to transmit a combined signal comprising a control signal and the second group of audio signals (in Shdema, see figs 1-3 and see page 4 [0034]-[0044]); and the device wherein the control signal comprises at least one of the following: a sound processing selection, an equalizer level, a power on, a power off, a time delay, and a phase delay(in Shdema, see figs 1-3 and see page 4 [0034]-[0044]).

Consider claims 85, 86, Swix as modified by Yasuhara and Shdema teaches the device wherein the characteristic does not represent an encoding format of the received audio signal (see figs 1, 2 and page 4 [0034]-[0044]); and the device wherein the characteristic is extracted and coded into the control signal prior to the second group of audio signals and the control signal being transmitted to the speakers via the network (in Shdema, see figs 1-3 and see page 4 [0034]-[0044]).

Response to Arguments

8. Applicant's arguments with respect to claims 47-55, 57-59, 61-65 and 67-86 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee (US PAT. 6,608,907) is cited to show other related wire, wireless, infrared, and powerline audio entertainment systems.

11. Any response to this action should be mailed to:

Mail Stop ____(explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
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Facsimile responses should be faxed to:
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501 The examiner

can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See
/LUN-SEE LAO/
Examiner, Art Unit 2614
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 04-16-2010

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614